

The file `syntonly.dtx` for use with L^AT_EX 2_ε.^{*}

It contains the code for `syntonly.sty`

Frank Mittelbach

Rainer Schöpf

April 18, 2011

This package implements the `\syntaxonly` declaration for L^AT_EX 2_ε. This command can be used in the preamble for running a document through L^AT_EX without actually getting any output.

1 Identification

We identify the package and its current version.

```
1 <package>\ProvidesPackage{syntonly}
2 <*dtx>
3           \ProvidesFile{syntonly.dtx}
4 </dtx>
5 <*package | dtx>
6           [1999/09/17 v2.1e Standard LaTeX2e package]
7 </package | dtx>
```

2 Implementation

```
8 <*package>
\dummyft@ First of all we need to define the ‘dummy’ font.
9 \font\dummyft@=dummy \relax

\ifsyntax@ Now we can define the ‘syntax only’ feature. We define a switch \if@syntax so
that any macro can always find out if it is really supposed to typeset text. Its
default is to run in normal mode.
10 \newif\ifsyntax@
11 \syntax@false

\syntaxonly The \syntaxonly macro sets up everything for syntax checking.
12 \def\syntaxonly{%
First of all it sets the syntax@ switch to true.
13   \syntax@true
Then it globally sets all fonts to the dummy font. These are: the current font
outside math mode,
14   \global\dummyft@
and the  $3 \times 16$  math fonts for the 16 math groups. We use a loop to set these.
15   \count@\sift@0n
16   \loop
17     \ifnum\count@ >\z@
18       \advance\count@\m@ne
19       \global\textfont\count@\dummyft@
20       \global\scriptfont\count@\dummyft@
21       \global\scriptscriptfont\count@\dummyft@
22   \repeat
```

^{*}This file has version number v2.1e, dated 1999/09/17.

Since all font changes occur either via `\selectfont` (in text or `\mathversion` (for math mode) it is sufficient to change these to no-ops. In addition we must prevent the loading of math fonts, this is done by making `\getanddefine@fonts` a no-op.

```
23 \global\let\selectfont\relax
24 \global\let\mathversion\@gobble
25 \global\let\getanddefine@fonts\@gobbletwo
```

We prevent \TeX from complaining about the dummy font having no characters.

```
26 \tracinglostchars\z@
```

Then we disable the output routine, and set `\frenchspacing` (which is slightly faster than `\nonfrenchspacing`). Finally we set `\hbadness` to 10000 to avoid overfull box messages.

```
27 \nopages@
28 \frenchspacing
29 \hbadness\@M}
```

`\nopages@` The `\nopages@` macro disables the \LaTeX output routine. To this end we define a very simple output routine that empties the output *and* footnote boxes (remember that the latter are insertions).

```
30 \def\nopages@{%
31 \output {\setbox\z@\box\ccclv
32 \setbox\z@\box\footins
33 \deadcycles\z@}%
```

Then we protect it against definition by a style file.

```
34 \newtoks\output
```

But this is not enough: normally the \LaTeX output routine is responsible for dealing with floating objects. We therefore also redefine the internal macros for handling floats and marginpars.

```
35 \def\@xfloat##1[##2]{%
```

There are a few things that have to be retained: the definition of `\@capttype` since it is used by the `\caption` command,

```
36 \def\@capttype{##1}%
```

the error message issued when not in outer paragraph mode,

```
37 \ifinner\@parmoderr\fi
```

and the `\@parboxrestore` command for the body of the float. This is necessary since it restores the original definitions of important commands like `\par` or `\.`

```
38 \setbox\@tempboxa\vbox\bgroup\@parboxrestore}%
```

`\end@float` must now only close the brace:

```
39 \let\end@float\egroup
```

The redefinition of the `\marginpar` command is a bit more complicated since we have to check for the optional argument. First we redefine the command itself:

```
40 \def\marginpar{\ifinner\@parmoderr\fi
```

We open a group so that everything gathered in a temporary box can easily be thrown away by closing it again (see below).

```
41 \begingroup \@ifnextchar [\@xmpar\@ympar}
```

`\@xmpar` and `\@ympar` are now defined similar to `\@xfloat` above. If an optional argument is present `\@xmpar` typesets it in a temporary box that is thrown away later. Then it calls up `\@ympar` to process `\marginpar`'s argument.

```
42 \long\def\@xmpar[##1]{%
```

```
43 \setbox\@tempboxa\vbox{\@parboxrestore ##1}\@ympar}%
```

`\@ympar` gathers its argument in the same temporary box and throws away its contents by closing the group opened up in `\marginpar` above.

```
44 \long\def\@ympar##1{%
```

```
45 \setbox\@tempboxa\vbox{\@parboxrestore ##1}\endgroup}%
```

And that's all we had to do.

46 }

`\@preamblecmds` We disable the use of the `\syntaxonly` command after `\begin{document}`

47 `\@onlypreamble\syntaxonly`

48 `\end{package}`